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ABSTRACT

Female college students (N=59) filled out the Bem Sex Role Identity Scale, and were told that they would be asked to do an anagram task. Half of the subjects, assigned on a random basis to the masculine task condition, were told that males do very well on the task, and that it seemed to be related to the masculine personality. The other half of the subjects were told that females do very well on the task, and that it seemed to be related to the feminine personality. Subjects completed the anagram task and were given random success or failure feedback. Subjects then filled out scales attributing the success or failure to each of the four major attributions: ability, effort, task ease/difficulty, and luck. Data were also collected on expectations for the same task in the future, and on affect. Results were analyzed by means of an analysis of variance, with sex role identity (feminine sex-typed vs. nontraditional women), masculine vs. feminine task situations, and success vs. failure feedback as factors. Results supported the hypothesis that nontraditional women would have a more self-enhancing pattern of attributions than feminine sex-typed women. Feminine sex-typed women attributed successes more often than nontraditional women to having had an easy task. In addition, feminine sex-typed women performed significantly less well on the anagram task than did nontraditional women. An inhibition factor was more apparent in the masculine task condition, suggesting that the lowered performance may be due to the sex role inappropriateness of the task. However, lowered performance may be due to other factors, and future research should explore this. (Author/AG)

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Attributions and Performance: The Effects of Sex Role Identity and Sex-Typed Tasks

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ATTRIBUTIONS AND PERFORMANCE: THE EFFECTS OF SEX ROLE IDENTITY AND SEX-TYPED TASKS

59 female college students filled out the Bem Sex Role Identity Scale, and were told that they would be asked to do an anagram task. Half of the Ss, assigned on a random basis to the Masculine Task condition, were told that males do very well on the task, and that it seemed to be related to the masculine personality. The other half of the Ss were told that females do very well on the task, and that it seemed to be related to the feminine personality. Ss completed the anagram task, and were given random success or failure feedback. Ss then filled out scales attributing the success or failure to each of the four major attributions - ability, effort, task ease/difficulty, and luck. Data was also collected on expectations for the same task again in the future, and affect.

Results were analyzed by means of an analysis of variance, with Sex Role Identity (Feminine Sex-typed vs. Nontraditional women), Masculine vs. Feminine Task situations, and Success vs. Failure feedback as factors. Results supported the hypothesis that Nontraditional women would have a more self-enhancing pattern of attributions than Feminine Sex-typed women. Feminine Sex-typed women attributed successes more often than Nontraditional women to having had an easy task. In addition, Feminine Sex-typed women performed significantly less well on the anagram task than did Nontraditional women. An inhibition was more apparent in the masculine task condition, suggesting that the lowered performance may be due to the sex role inappropriateness of the task (although it may be due to other factors, and future research should explore this).

All Ss had higher future expectation for the same task again in the future when the task had been defined as a masculine one. This may be due to Ss' cognitions that masculine tasks are due to unstable factors like effort and luck. Feminine Sex-typed Ss saw outcomes on the masculine tasks as due

more often to luck than did Nontraditional women, in an interaction effect. This is explained in terms of the perceived sex role inappropriateness of this task for these women, and less past experience with masculine tasks.

Future research should continue to explore the impact of masculine and feminine task situations on women's attributions for success and failure. In addition, the links between attributional patterns and performance should be examined, as well as the impact of sex role identity and masculine and feminine task situations on performance for women.

ATTRIBUTIONS AND PERFORMANCE: THE EFFECTS OF SEX ROLE IDENTITY AND SEX-TYPED TASKS

Condry and Dyer (1976) have argued that the data from the Fear of Success research points to a situational rather than a motivational interpretation. What has been labeled Fear of Success is really a fear of deviating from the sex role norms and stereotypes of the culture. This suggests that the perceived sex role appropriateness of a task may affect achievement and attributional patterns in women.

The sex role appropriateness of a task has been shown to affect achievement imagery (Lesser, Kravitz, and Packard, 1963), expectations for success (Hoffman and Maier, 1966), persistence in a task (Stein, Pohly, and Mueller, 1971), and even performance on a task (Milton, 1959), Stein and Bailey (1973) have argued that women are motivated to achieve, but are more likely to be aroused to achieve in more traditionally feminine areas, such as social skill. They also suggest that women who are motivated to achieve may expand their definition of femininity to include achievement in intellectual activities.

Recent research on achievement in women has focused on cognitive factors, and sex differences have been found in attributional patterns for men and women. (Frieze, 1977); Nicholls, 1975). The four attributions used most often by subjects to explain the causes of success and failure are ability, effort, task ease/difficulty, and luck (Weiner, 1974). Ability and effort are categorized as internal attributions, while luck and task ease reflect

a more external locus of control. The impact of both person and situation variables on attributions for success and failure in women is beginning to be explored. In preliminary studies, achievement motivation in women has been found to be related to greater use of the effort attribution in explaining the causes of success (Frieze, 1977).

Some studies have explored the impact of sex role identity on attributional patterns (Pasquella, Nednick, and Murray, 1977). Using the BSRI Scale (Bem, 1974), Feminine Sex-typed women attributed success less often to their own ability, and had lower future expectations after success, than did a group of Nontraditional (Androgynous and Masculine-typed) women (Lee, 1977). Feminine Sex-typed women also attributed success more often to having had an easy task, and attributed failure more often to a lack of ability than did women with a less traditional sex role orientation. These findings reflect a pattern of self-derogatory attributions for the Feminine Sex-typed women. The task situation in this study was subjects' recalled life experiences. These findings were especially interesting, since subjects were free to recall role consistent experiences. A content analysis of the life experiences described by subjects showed that 92% of the Feminine Sex-typed women did describe tasks coded as either feminine or neutral (Lee, 1977).

Masculine and feminine task situations have been found to influence both self and others' attributions. In a study of attributions for the success and failure of others (Deaux and Emswiller, 1974), performance by a male person on a masculine task was seen by both males and females as due to ability, while success for a female person in a masculine task was attributed by both men and women to luck. The reverse was not true for the feminine task.

In a study of self attributions (Stephan and Rosenfield, 1977), males made more self-enhancing attributions (attributing success internally and failure externally) than females on a masculine task. When the same task

was defined as feminine, females made more self-enhancing attributions than males. These findings are explained in terms of the ego-involvement of the subjects in role-consistent masculine and feminine tasks. The results are also consistent with Stein and Bailey's thesis) (1973) that women may be motivated to achieve in feminine areas.

What is the impact, then, of sex role identity on attributional patterns in masculine and feminine task situations? Bem (1975) found that Feminine Sex-typed women were less willing to engage in cross-sex behaviors than were Androgynous women. This suggests that Feminine Sex-typed women may also have less self-enhancing attributional patterns in masculine task situations. The results of my (1977) study suggest that even when subjects are free to recall role-consistent life experiences, Feminine Sex-typed women have a less self-enhancing pattern of attributions than Nontraditional women. The present study was designed to explore the impact of both sex role identity and masculine vs. feminine task situations on attributions for success and failure in an anagram task. The hypotheses are:

1) Overall, Nontraditional women will have a more self-enhancing pattern of attributions than Feminine Sex-typed women.

2) Feminine Sex-typed women will have a less self-enhancing pattern of attributions in the masculine task than in the feminine task.

3) Even in the feminine task, Nontraditional women will have a more self-enhancing pattern of attributions than Feminine Sex-typed women.

Note: The notion of self-enhancing attributional patterns (attributing success internally, to ability and effort, and failure externally, to luck and task difficulty) is based in part on findings that internal attributions for success are associated with higher achievement motivation (Weiner, 1974; Frieze, 1977) and, in males, higher self esteem (Fitch, 1970).

PROCEDURE AND METHOD

Subjects were 59 full time undergraduate college women enrolled in day courses at 3 New York City area colleges. Subjects were tested in classroom groups ranging in size from 7 to 15.

Ss were told that the study concerned the relationship between personality characteristics and performance on an anagram task, and all Ss participated on a voluntary basis. Ss first filled out the BSRI Scale (Bem, 1974), then read instructions concerning the anagram task. For Ss randomly assigned to the Feminine Task condition, the instructions contained the following: "...Past research has shown that this is a task in which women do very well. Success in this task seems to be related to sensitivity to subtle verbal cues. It is an indication of the ability to sense feelings being expressed by others, and an indication of the future potential to be aware of other people's needs and feelings. It seems to be related to the feminine personality."

For Ss randomly assigned to the Masculine Task condition, the instructions read:"...Past research has shown that this is a task in which men do very well. Success in this task seems to be related to intelligence and logic. It is an indication of the ability for business decision-making, and an indication of future potential for making rational judgements based on verbal information. It seems to be related to the masculine personality." These instructions were adapted from the study by Stephan and Rosenfield (1977).

Ss then responded to a question about the importance of doing well in the task (3 point scale) and expectations for success or failure in the task (4 point scale). Then, all Ss were given 5 minutes to make as many words as possible from the letters of the word GENERATION. The GENERATION anagram has previously been used in research on Fear of Success (Horner, 1974).

Ss received success or failure feedback (on a random basis), then answered questions about the amount of ability, effort, luck, and task ease/difficulty involved in the success or failure. The attributions were answered on 7 point scales. In addition, Ss responded to a question about future expectations in the same task again in the future (3 point scale), and the amount of pride or shame experienced after the success or failure (6 point scale).

RESULTS AND DISCUSSION

Analysis of data. The results concerning attributional patterns, future expectations in the same task, and reported affect were analyzed by means of a 2 X 2 X 2 analysis of variance, using a hierarchical stepdown analysis (Nie, Hull, Jenkins, Steinbrenner, and Bent, 1975). The factors were: Outcome (success or failure on the anagram task), Sex Role Identity (Feminine Sex-typed vs. Nontraditional women), and Sex of Task (feminine vs. masculine task situations).

Results concerning importance of the task to the subjects, expectations in the task, and performance on the anagram task were analyzed by means of a 2 X 2 analysis of variance, with Sex Role Identity and Sex of Task as factors.

Ss were divided at the median based on the t-ratio score on the Bem scale (Bem, 1974). The median was 1.274. Ss who scored above the median were labeled Feminine Sex-typed, and those who score below the median were labeled Nontraditional. This median is just above the cutoff point suggested by Bem for defining the Feminine Sex-typed category ($t \geq 2.025$ (Bem, 1976).

Attributions. All Ss made more internal attributions to both ability and effort in the success situation than they did in the failure situation. Main effects due to the success or failure outcome were significant for the ability and effort attributions ($F=43.18$; $p>.01$; $F=44.35$; $p>.01$, respectively). Ss also reported experiencing more pride and happiness after success than after

failure ($F=91.96$; $p>.01$).

Outcome as a main effect also significantly affected subjects' attributions to task ease/difficulty. Subjects explained the causes of success by saying that the task was easy more often than they attributed failure to having had a difficult task ($F=26.44$; p .01). Feminine Sex-typed women were more likely than Nontraditional women to use the task ease/difficulty attribution ($F=6.35$; $p>.05$), and this was especially true in the success situation. Feminine Sex-typed women were more likely than Nontraditional women to explain success by saying that it was due to having had an easy task ($t=2.48$; $p>.01$, one-tailed).

Frieze (1977) reports on research suggesting that females rate tasks as easier after both success and failure than males. She believes that this is a part of a self-derogatory pattern of attributions for women. Succeeding in an easy task is less self-enhancing than succeeding on a difficult task. In the present study, Feminine Sex-typed women were more likely to attribute success to having had an easy task, thus minimizing their successes.

In line with this self-derogatory pattern for Feminine Sex-typed women, this group of subjects made more luck attributions in the masculine task situation than did the Nontraditional women (Figure 1.). The interaction of Sex Role Identity and Sex of Task was significant ($F=5.76$; $p>.05$). Feminine Sex-typed women saw both success and failure in masculine tasks as being due to luck and chance circumstance more often than did the Nontraditional women. There was only a slight difference between the two groups for luck attributions in the feminine task situation. Thus, the causes of masculine tasks are seen as being more variable and unpredictable by the Feminine Sex-typed women. This may be because these tasks are less role-consistent, and subjects have less past experience with them.

In addition, there was a tendency for Feminine Sex-typed women to explain all of their successes more often by good luck, when compared with luck attributions for the Nontraditional women ($t=1.42$; $p>.08$, one-tailed). This trend was not significant, but was in the direction of support for the hypothesis that Feminine Sex-typed women would have a less self-enhancing pattern of attributions than the Nontraditional women.

A significant main effect occurred for the Sex of Task condition with respect to future expectations for the same task again in the future. Subjects had higher future expectations for the same task again in the future when the task was described as a masculine one ($F=4.12$; $p>.05$). Higher future expectations after a masculine task may reflect subjects' cognitions that masculine task successes are due to unstable causes like effort or luck, which may vary considerably from one situation to another (Frieze, 1977). After success, Nontraditional women had higher expectations for the same task again in the future than Feminine Sex-typed women ($t=1.43$; $p>.08$, one-tailed). The difference did not attain significance, but it is in the direction of support for the hypothesis that Nontraditional women would have a more self-enhancing pattern of attributions.

Performance and expectations for success. Subjects' performance on the anagram task was affected by Sex Role Identity. Feminine Sex-typed women made fewer words on the anagram task than did Nontraditional women ($F=4.29$; $p>.05$). An inhibition was more apparent for the Feminine Sex-typed women in the masculine task situation than in the feminine task situation (Table 2). This is extremely interesting, because it suggests a connection between the self derogatory pattern of attributions of Feminine Sex-typed women (Lee, 1977) and actual behavior, as predicted by the attribution theory model (Weiner, 1974; Frieze, 1977). It is unclear in the present study, however,

whether this difference reflects differences in ability level, achievement motivation, or even a novel task situation for the Feminine Sex-typed women. The fact that there was a tendency for performance to be lowest in the masculine task situation for the Feminine Sex-typed women lends some support to the notion that the lower level of performance may be due to the perceived sex role inappropriateness of the task for these women.

An unexpected finding of the present study was a significant interaction effect for expectations for success or failure in the task ($F=5.32$; $p > .05$). Nontraditional women had slightly higher expectations for success in the feminine task than in the masculine one. Feminine Sex-typed women had slightly higher expectations in the masculine task than in the feminine one. It is difficult to account for these results within the pattern of results reported above. It does suggest, however, that the sex role appropriateness of the task may affect expectations for women.

Conclusions. The overall pattern of results in the present study suggest that Nontraditional women had a more adaptive and self-enhancing pattern of attributions than did Feminine Sex-typed women. The results are not clearcut, however, and significant results occurred only with respect to the task ease/difficulty attribution such that Feminine Sex-typed women attributed their successes more often to having had an easy task. They also attributed success more often to good luck, and had lower future expectations after success, but these trends were not quite significant. These results are consistent with the findings of an earlier study on attributional patterns in recalled life experiences of subjects (Lee, 1977).

The impact of Sex of Task lead to higher future expectations for all Ss when the task was described as a masculine one. Also, Feminine Sex-typed women saw both success and failure outcomes as being due more to luck when the task

was masculine, than did Nontraditional women. Hypotheses about the interaction of Sex Role Identity and Sex of Task were not supported by the results.

One of the most interesting findings of the present study was that the Nontraditional women made significantly more words on the anagram task than did Feminine Sex-typed women. While this may be due to a number of factors, the lowered performance for Feminine Sex-typed women in the masculine task condition does suggest that it may be due to the perceived sex role inappropriateness of the task, and this should be explored in future research. Since the Nontraditional women also had more self-enhancing attributional patterns, future research studies should also examine the links between attributional patterns and actual behavior.

Table 1. Table of Means for Attributions, Future Expectations, and Affect

		Task ease					
		Ability	Effort	Dif	Luck	Future	Affect
SUCCESS	Androg	5.88	5.88	3.76	1.59	2.65	4.94
	M	6.22	6.11	3.89	1.11	2.78	5.0
	F	5.50	5.63	3.62	2.13	2.50	4.88
	Sex-type	6.23	5.77	5.31	2.23	2.38	5.0
	M	6.20	6.20	4.60	2.20	2.40	5.40
	F	6.25	5.50	5.75	2.25	2.37	4.75
FAILURE	Androg	2.92	3.08	2.08	2.31	2.54	3.08
	M	2.33	2.0	1.0	1.0	3.0	3.33
	F	3.10	3.40	2.40	2.70	2.40	3.0
	Sex-type	3.81	3.12	2.56	2.38	2.50	2.67
	M	3.70	2.90	2.60	3.0	2.60	2.80
	F	4.0	3.50	2.50	1.33	2.33	2.40

Note: All measures are on 7 point scales except Future Expectations (3 point) and Reported Affect (6 point).

Table 2. Table of Means for Importance of Task, Expectations for Success or Failure, and Performance (number of words made on the anagram task)

	Importance	Expectations	Performance
Androg	3.36	2.17	31.06
M	3.58	1.92	31.58
F	3.22	2.33	30.72
Sex-type	3.28	2.20	25.35
M	3.20	2.33	23.87
	3.36	2.07	26.93

Table 3. Table of F's

	Ability	Effort	Task	Luck	Future	Affect
Outcome (O)	43.18**	44.35**	26.94**	1.46	<1	91.96**
Sexrole (R)	2.35	<1	6.35*	<1	1.07	<1
Sex (S)	<1	<1	1.57	<1	4.12*	1.35
O X R	<1	<1	<1	<1	<1	2.02
O X S	<1	3.19	<1	<1	<1	<1
R X S	<1	<1	<1	5.76*	1.24	<1
O X R X S	<1	<1	2.82	1.98	<1	<1

**p .01
*p .05

Table 4. Table of F's

	Importance	Expectations	Output
Sex(S)	<1	<1	<1
Sexrole(R)	<1	<1	4.29*
S X R	2.08	5.32*	<1

*p .05

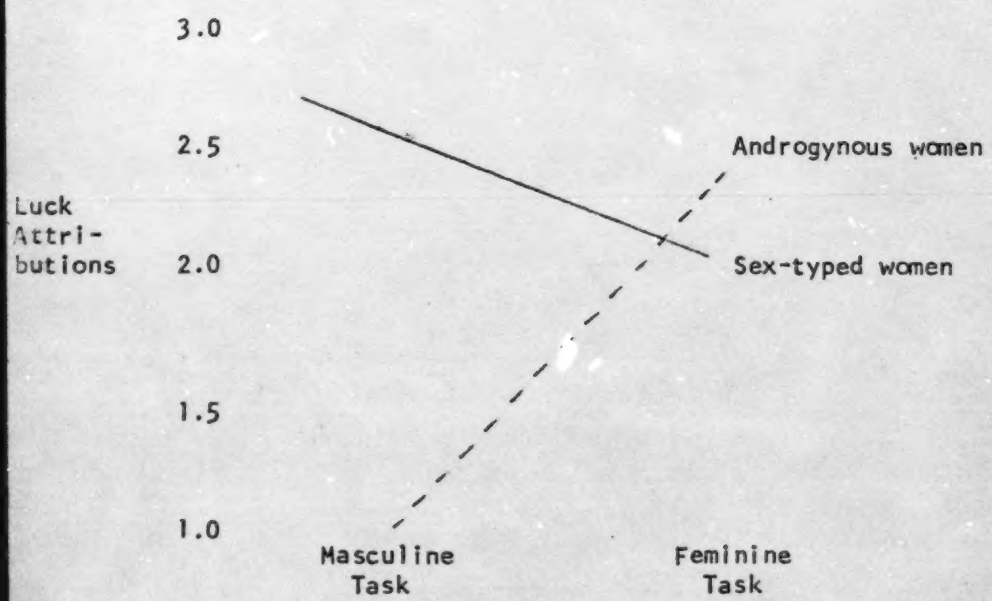

Figure 1. Interaction of Sexrole and Sex of Task for LUCK

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